

Abstract**METHOD AND APPARATUS FOR TRANSMITTING INFORMATION IN
VARIOUS CARRIER FREQUENCIES**

The present invention is directed to a method and to an apparatus for the
5 transmission of information in various carrier frequencies with a frequency hopping
method, whereby a random sequence [...] a plurality of N possible carrier frequency
values f_x in addresses 1 through N of a table 25 is offered. The N possible carrier
frequency values are thereby arranged in n sub-groups. At least a part M of the N
carrier frequency values f_x is periodically repeatedly read from the table 25, whereby
10 the carrier frequency values within each sub-group are sequentially read out from the
corresponding addresses and the sub-groups are read out in a specific sequence. $M \leq$
N thereby applies. Information are subsequently transmitted in carrier frequencies
that correspond to the carrier frequency values that have been read out. The method
and the apparatus of the present invention can be implemented, for example, in a
15 mobile station and/or a base station of a mobile radiotelephone system.

Figure 3